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HARNES DICKY & PIERCE
PO BOX 828
BLOOMFIELD HILLS MI 48303

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/651,562

Applicant(s)

Roberts et al

Examiner

TUAN HO

Group Art Unit

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☒ Responsive to communication(s) filed on Aug 27, 1997

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 47-78 and 80-108 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 47-78 and 80-108 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 14

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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1. The Office Action mailed 4/28/97 has been withdrawn pursuant to Applicant's arguments in the interview held 8/15/97 (Paper # 12).

2. The allowance of claims 47-61 has been withdrawn because of new ground of rejection is applied to the claims. Examiner regrets any inconvenience to the Applicants.

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 47-78 and 80-104 are rejected under the judicially created doctrine of double patenting over claims 1-18 of U. S. Patent No. 5,138,459 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: "output data control means" and "logic means" in claims 47 and 56, steps of storing, formatting and storing the formatted digitized version in a memory in claim 62, memory, format

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determining means in claim 66, steps of retrieving, storing in claim 69, input interface, converter output interface, stored program controller in claim 72, input interface, converter, output interface controller in claim 75, steps of reading, converting, determining, formatting in claims 79 and 80, output data file format determining means, logic means for removably mounting a digital memory in claim 82, input interface, converter, generator, output data file format determining means, logic means, and output interface in claim 84, optic lens, shutter means, array, analog to digital converter memory means output data control means, and logic means in claim 88, input means, means for converting, means for providing and means for formatting in claim 96, digital data format means, and means for formatting in claim 99, and converting the captured analog signal data, arranging the digital image data in claim 104 . In addition, 1) claims 1-8 of U.S. Patent '459 recite the term "comprising" and 2) the electronic still video camera is shown in Figs. 2 and 10, which includes all the limitation of the claims 1-18 of U.S. Patent '459 and claims 47-104 of the present application.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 47, 53, 55-57, 60, 61, 69, 70, 72-81, 88, 90, 91, 93, 96-102 and 104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawahara et al. (US 4,758,883) in view of Eikonix (9129188) and the Macintosh System Software User's Guide, Version 6.0.

With regard to claim 47, Kawahara shows a digital camera (figure 5A) where digital signals representing image data are stored in "magnetic bubble memory cassette 33" (see col. 4, line 58 - col. 5, line 9). Kawahara further teaches the memory cassette is removable in order to be placed in a "playback apparatus" (see col. 9, lines 48-50). Kawahara fails to specifically disclose that the playback apparatus is a computer or that removable memory 33 is a standard 3.5" floppy disk which is checked upon power up for a required format. Eikonix demonstrates that it is well known in the art to interface a digital imaging system with a computer. Eikonix discloses a digital imaging camera system which, through the appropriate interface, is connected to either an IBM or Macintosh computer. The use of a computer as the "playback apparatus" in Kawahara would have allowed the user to take advantage of a readily available means in which to store (download) and view the captured images. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a standard IBM or Macintosh computer as the playback apparatus disclosed by Kawahara in order to provide the user with a standard yet powerful means of viewing and/or editing the captured image data.

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Both Kawahara and Eikonix fail to disclose the use of a standard 3.5" floppy disk as the removable memory onto which the digital signals representing image data are stored and in which the format code checking function is performed so as to be associated with each captured image to be stored in the memory. The Macintosh System Software User's Guide teaches the use of a computer which can format a standard blank 3.5" floppy disk into two different formats (one-sided disk format, or two-sided format, table 7-1) when electrical power is provided to the floppy drive of the computer wherein upon an operator mouse control, a cursor would select one-sided format or two-sided format (see pages 173 and 174). Prompting the user to format a blank disk when power is supplied to the disk as it is being read would have insured that data was correctly written to the disk. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a standard 3.5" floppy disk as the removable memory in the Kawahara as modified by Eikonix device in order to provide a standard interface to the computer. Furthermore, it would have been obvious to one of ordinary skill in the art to check the format of the floppy disk upon powering up the disk to be read and to perform a standard formatting operation in the event that the memory was not properly formatted, and to select disk format by using a cursor in the case where one-sided disk format or two-sided format is properly selected for a particular floppy disk size thereby insuring the integrity of the written digital data stored in the disk.

Regarding claimed output data control means, it is noted that Eikonix digital camera system stores data format codes for Apples Macintosh II and IBM, which are used to covert

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image data into an image data format compatible to IBM or Apples Macintosh computer.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify the camera circuit of Kawahara et al in view Eikonix so that the circuit would store data format codes of IBM or Apples Macintosh, and select one of the data format code to be associated with the image data as needed.

Regarding claimed logic means, since the video camera of Kawahara et al in view of Eikonix can select data format codes stored in a memory so as to convert image data into a formatted image data which can be used in IBM or Apple Macintosh computer. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to implement a control switch in the camera of Kawahara et al in view Eikonix in order to select an output data format in responsive to the selection of one of the data format codes stored in the camera because the control switch would facilitate a camera operation by a user.

With regard to claim 53, claim 53 recites what was previously discussed in claim 47.

With regard to claim 55, Kawahara et al discloses the same control means (DCPM circuits 28 and 29 compress an image signal from CCD sensor 18 so as to control an amount of image data which is stored in the memory (col. 4, lines 11-33).

With regard to claim 56, Furthermore, Kawahara et al discloses the same means for capturing image data (CCD sensor 18), means for digitized captured image data (A/D converter 27).

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With regard to claim 57, claim 57 recites what was previously discussed with respect to claim 47.

With regard to claim 60, claim 60 recites what was previously discussed with respect to claim 47.

With regard to claim 61, a remote activation device for remotely activating another device is old and well known in the art, for example, TV remote control is used to activate a TV set at a distance so as to facilitate TV control operations. Official Notice is taken for a remote activating device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to implement a remote activating device in the video camera of Kawahara et al in view of Ekonix and Macintosh User Guide so as to control the camera at a distance and to thereby facilitate a camera operation.

With regard to claim 69, method claim 69 corresponds to apparatus claim 47 and is analyzed the same as apparatus claim 47.

With regard to claim 70, Macintosh discloses the same step of automatically performing memory format initialization of the digital memory (initialization step is performed in checking format step of Macintosh , page 176, line 1-5).

With regard to claim 72, claim 72 corresponding to claim 47 with the additional limitation of the " a translator housing", "an input interface in the translator housing for removable receipt of a first memory element containing a first electrical representation", "a converter to convert first electrical representation into a second electrical representation". The claimed "translator" merely

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reads on the digital camera of Kawahara et al which takes the electrical signals from CCD 18, amplifies in amplifier 26, converts them to digital signals in A/D converter 27 and then performs DPCM conversion via 28 and 29 before storing them in removable memory 33 (see figure 5A). Kawahara et al in view of Eikonix further in view of Macintosh User Guide does not disclose a removable receipt of a first memory element. However, an Official Notice is taken for a memory which provides a signal representation of an image captured such as VHS magnetic video tape. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to substitute a video tape in place of the image sensor CCD 18 of Kawahara et al so as to produce an image signal prerecorded in the tape, to thereby provide a formatted image signal which can be used in a personal computer.

With regard to claim 73, claim 73 corresponds to claim 47 with the additional limitation "perform format initialization of the second memory" (Macintosh User Guide discloses the initialization step in page 174).

With regard to claim 74, Macintosh discloses the same output interface (memory slot receives floppy disk 3.5").

Claims 75 recites what was previously discussed with respect to claim 72.

With regard to claims 76, 77 and 78, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to give the user a choice as to select a particular video tape format such as NTSC, PAL or RGB video format in order that the disk is properly formatted for use with the format of the Macintosh computer.

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With regard to claim 79, method claim 79 corresponds to apparatus claim 72 and is analyzed the same as apparatus claim 72.

With regard to claim 80, method claim 80 is corresponds to apparatus claim 72 and is analyzed the same as apparatus claim 72.

With regard to claim 81, Macintosh User Guide discloses in initialization step that when the disk is not formatted, the user would format the disk (page 174).

With regard to claim 88, claim 88 corresponds to claim 47 with the limitation "optical lens", and "shutter means" (Kawahara et al discloses lens 12 and an electronic shutter, col. 3, lines 23-30).

With regard to claim 90, Macintosh User Guide discloses the same memory means comprising the digital memory means (3.5" floppy disk is divided into different sections to store different digital information, page 173).

With regard to claim 91, Macintosh User Guide discloses the same memory organizing means (the Macintosh computer inherently includes an organizing means which is used to format 3.5" floppy disk, page 173).

With regard to claim 93, Macintosh User Guide discloses the same memory allocating means (the Macintosh computer inherently includes a memory allocating means which is used to allocating 3.5" floppy disk in accordance with a data format code, page 173 3.5" floppy disk, page 173).

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With regard to claims 96, 97 and 98 recite what was previously discussed with respect to claims 72-74 and 82-85.

With regard to claim 99, 100 and 101, claims 99, 100 and 101 recite what was previously discussed with respect to claim 47.

With regard to claim 102, claim 102 is a method claim corresponds to claim 47 and is analyzed the same as apparatus claim 47.

With regard to claim 104, claim 104 recites what was previously discussed with respect to claim 47.

5. Claims 48, 49, 50-52, 54, 58, 59, 62-68, 71, 80, 82, 83, 86, 84, 87, 89, 92, 94, 95, and 103 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawahara et al in view of Eikonix further in view of Macintosh System Software User's Guide and Sasaki et al' 017.

With regard to claim 48, Kawahara et al in view of Eikonix further in view of Macintosh System User's Guide discloses the same subject matter as previously discussed with respect to claim 47, except for the picture image resolution determining means.

Sasaki et al teaches the use of a video still camera which includes a pair of triangular button switches 12B1 and 12B2, wherein the switches is used to select image resolution by selecting compression rate $1/N$; as a resulting of selecting compression rate, amount of image data stored in a memory can be controlled in accordance with a memory capacity (col. 6, lines 1-48).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to implement switches 12 of Sasaki et al in the camera circuit of Kawahara et al in view of Eikonix and Macintosh system User Guide, in order to select image resolution by selecting compression of image data thereby to control an amount of image data stored in a memory.

With regard to claim 49, Kawahara et al in view of Eikonix further in view of Macintosh User Guide discloses the same removable mounted digital disk (3.5" floppy disk).

With regard to claim 50, Sasaki et al discloses the same record marking means (pair of switches 12 are used to select a compression rate in accordance with an image resolution, where the compression rate is stored in the memory as a digital code mark for indicating compression algorithm parameters to be utilized in decompressing each the compressed image in the memory, col. 9, lines 40-51 and Fig. 9B).

With regard to claims 51 and 52, Sasaki et al discloses the same record marking means (pair of switches 12, col. 6, lines 40-48).

With regard to claim 54, claim 54 corresponds to claim 47 with the additional limitation audio recording means. Further, Sasaki et al discloses voice data which is recorded in memory card 15 (col. 9, line 47-54) wherein voice data is associated with the image data when a picture is taken. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to implement a circuit as disclosed by Sasaki et al in the camera circuit of

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Kawahara et al in view of Eikonix further in view of Macintosh User's Guide for recording voice data in accordance with an image data on the memory.

With regard to claim 58 and 59, Further, Sasaki et al discloses the same image resolution determining means (pair of switches 12 are used to select compression rate and determines whether an image frame should be compressed at high compression rate (low resolution) or low compression rate (high resolution), col. 6, lines 40+).

With regard to claim 59, Sasaki et al discloses the same record marking means (pair of switches 12 are used to select a compression rate and indicates a compression selected by a user as shown in Fig. 18B).

With regard to claim 62, claim 62 corresponds to claim 47 with the additional limitation selectively addressable memory. Sasaki et al discloses the same selectively addressable memory (memory card 15 is used to store voice data and image data under selectively addressable memory, col. 9, lines 40-55, wherein information data in the selectively addressable memory can be easily stored and selected). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to substitute the memory 15 of Sasaki et al in the place of magnetic bubble memory 33 of the video camera of Kawahara et al in view of Eikonix and Macintosh User Guide so as easily to store image data and to select the data form the memory.

With regard to claim 63, Macintosh User Guide discloses the same step of checking the format and performing memory format initialization of the memory (page 176, lines 1-5).

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With regard to claim 64, Macintosh User Guide discloses the same digital memory (3.5" floppy disk).

With regard to claim 65, Macintosh User Guide discloses the same digital memory (a 3.5" disk which is used in accordance with a personal computer as discussed with respect to claim 47).

With regard to claim 66, recites what was previously discussed with respect to claim 62.

With regard to claim 67, Macintosh User Guide discloses the same means for checking format status and performing memory format initialization (page 176, lines 1-5).

With regard to claim 68, Sasaki et al discloses the same means for storing in the image data memory element a signal to signify which of the plurality of compression algorithm parameters (compression rate is inherently recorded together with compressed image signals as shown in Fig. 9B).

With regard to claim 71, Sasaki et al discloses the same means for storing in the image data memory element a signal to signify which of the plurality of compression algorithm parameters (compression rate is inherently recorded together with compressed image signals as shown in Fig. 9B, wherein the compression rate associated with the compressed image corresponds to a decompression algorithm parameter when the compressed signal is decompressed).

With regard to claim 82, claim 82 corresponds to claim 47 with the additional limitation "a memory for storing output data file format determining code data" "generator for examining the digitized version of the captured image and generating a corresponding picture size indication"

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and "logic means responsive to the picture size indication generator and output data file format determining means for selectively arranging picture size indication data". Sasaki et al teaches the use of CPU 24 which can produce information indicative the imaging system, that is, the 525 (lines)/60 (fields) system (NTSC) or 625 (lines)/50 (fields) system (PAL) upon a desired selection of a user (col. 7, lines 47-63 and col. 9, lines 40-50 and Fig. 9B); theses system corresponds to picture size indication; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify the camera circuit of Kawahara et al in view of Eikonix and Macintosh User Guide, in order that the camera circuit determine the digitized image signal and generating a corresponding picture size indication to thereby insure the picture size to be in a desired TV system. Regarding the limitation "logic means", since the camera circuit determines and generating a picture size indication, pair of switches 12 are inherently included in the process of selecting arranging picture size indication and a proper format to format the digital image signal, wherein the image signal is stored in the 3.5" floppy disk.

With regard to claim 85, the Macintosh reference discloses an initialization step in formatting a disk (page 174).

Method claims 83 and 86 correspond to apparatus claims 82 and 85, and are analyzed the same as apparatus claims 82 and 85.

With regard to claims 84 and 87, claim 84 corresponds to claims 82 and 85 with the additional limitation "an input interface for receipt of a first electrical representation of a captured image" and "an output interface". The claimed "translator" merely reads on the digital camera of

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Kawahara et al which takes the electrical signals from CCD 18, amplifies in amplifier 26, converts them to digital signals in A/D converter 27 and then performs DPCM conversion via 28 and 29 before storing them in removable memory 33 (see figure 5A). Kawahara et al in view of Eikonix further in view of Macintosh User Guide does not disclose a removable receipt of a first memory element. However, an Official Notice is taken for a memory which provides a signal representation of an image captured such as VHS magnetic video tape. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to substitute a video tape in place of the image sensor CCD 18 of Kawahara et al so as to produce an image signal prerecorded in the tape, to thereby provide a formatted image signal which can be used in a personal computer. Regarding "an input interface" and "an output interface", an interface is inherently included in the process of converting the CCD image sensor to a device to receive the video tape, and a device to transmit the formatted image signals to a 3.5" floppy disk.

Claim 89 recites what was previously discussed with respect to claim 48; wherein marking means is corresponds to compression select switch 12 for select a compression rate which is recorded in the 3.5" disk.

Claim 92 corresponds to claim 48 with the additional limitation "marking means". Sasaki et al discloses select switch 12 for select a compression rate, wherein the compression rate is recorded in a memory as a decompression parameter to be used in a decompression process.

With regard to claim 95, further, Sasaki et al discloses compression rates which are recorded in the memory upon a user selection by using pair of switches 12.

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With regard to claim 94, recites what was previously discussed with respect to claim 48.

With regard to claim 103, claim 103 recites what was previously discussed with respect to claim 48.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).


7. This action is not made Final since new ground of rejection has been applied to the claims.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to T. Ho whose telephone number is (703) 305-4943. The examiner can normally be reached on Mon-Fri from 8AM to 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, A. Faile, can be reached on (703) 305-4380. The fax phone number for this Group is (703) 308-5399.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.


ANDREW I. FAILE
SUPERVISORY PATENT EXAMINER
GROUP 2700



T. Ho

Patent Examiner

April 15, 1998